

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

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OFFICE OF  
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: EPA reg. No. 3125-183; Disulfoton (Di-Syston)<sup>®</sup>  
Dominant Lethal Test in Mice; Additional Information  
Caswell No. 341

TO: George LaRocca  
Product Manager (15)  
Registration Division (TS-767)

THRU: Christine F. Chaisson, Ph.D. *CF Chaisson 11/6/84*  
Head, Review Section IV  
Toxicology Branch  
Hazard Evaluation Division (TS-769)

FROM: George Z. Ghali, Ph.D. *G. Ghali 10/24/84*  
Toxicology Branch  
Hazard Evaluation Division (TS-769)

Registrant: Mobay Chemical Corporation *WBS 11/08/84*  
Kansas City, MO 64120

Action Requested:

Re-evaluation of a dominant lethal study in mice in the light of additional information submitted by the registrant.

Background:

Recently Toxicology Branch completed an evaluation of a dominant lethal study on technical Di-Syston (Accession No. 250895, G. Ghali, 3/13/84). In this review, Toxicology Branch concluded that the test chemical did not induce mutagenic response under testing conditions. Toxicology Branch also questioned the lack of cholinergic signs in the test animals. The study was given a tentative classification and considered as supplemental data until the above issue is resolved, and further evaluation is made.

In a letter dated June 19, 1984, Mobay Chemical Corporation provided a plausible explanation for the lack of cholinergic signs in the test animals (a copy of Mobay's letter is attached).

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Conclusions and Recommendations:

The explanation provided by the registrant for the lack of cholinergic symptoms in the experimental animals is acceptable. However, further evaluation of the study for re-registration purposes, indicated that no positive control was concurrently tested in the study. Consequently, the assay's sensitivity cannot be evaluated. Therefore, the classification of this study will remain the same.

Core Classification:

Unacceptable

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